Power Clean

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	**Power Clean**
Product use	**Chemical (Fuel additive)**
Manufacturer & Supplier	**TABCHEM**
Address	**TABCHEM CHEMICAL INDUSTRIES COMPANY, NO. 97, 5TH FLOOR, SOUTH IRANSHAHR STREET, BELOW SOMAYEH STREET, TEHRAN, IRAN**
Phone Numbers	**+98 21 8884 0868**
Fax Number	**+98 21 8882 8776**
Email	**info@tabchem.ir**
Website	**https://tabchem.ir**

2. COMPOSITION/ INFORMATION ON INGREDIENTS

Component	CAS No.	Weight Percent Range
Hydrosulfurized Kerosene	64742-81-0 / 8008-20-6	<95%
Solvent naphtha (petroleum), light aromatic	64742-95-6	1-10%
2-Ethyhexanol	104-76-7	1-10%
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3	<4%
Polyolefin alkyl phenol alkyl amine	Proprietary	<4%
1,2,4-Trimethylbenzene	95-63-6	<3%
Solvent naphtha, heavy aromatic	64742-94-5	<3%
Ethyl benzene	64742-94-5	<3%

3. HAZARDS IDENTIFICATION

Emergency and Hazards Overview

Appearance: liquid light yellow

Odor : amine-like

CAUTION: Flammable. Highly Toxic. Contains components that may cause cancer.

NFPA: **Flammability**

Health 

Reactivity

Specific Hazard

HMIS III:

HEALTH	2
FLAMMABILTY	2
PHYSICAL	0

0 = Insignificant, 1=Slight, 2-Moderate

3= High, 4= Extreme

Danger

Health Hazards: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention immediately.

Inhalation: This product has a low vapor pressure and is not expected to present an inhalation hazard at ambient conditions.

Ingestion: Do not ingest. This product is relatively non-toxic by ingestion. May be fatal if swallowed. Aspiration hazard if swallowed.

Skin Contact: Avoid skin contact. This product may cause skin irritation upon direct contact can be absorbed through skin.

Eye Contact: May cause irritation toeyes.

Chronic Exposure: Repeated over-exposure can damage liver, kidneys and central nervous system.

4. FIRST AID MEASURES

Eye Contact:

Immediately flush eyes with large amounts of water and continue flushing until irritation subsides. If material is hot, treat for thermal burns and seek immediate medical attention.

Skin Contact:

Remove contaminated clothing.

Wash contaminated area thoroughly with soap and water. If redness or irritation occurs and persists, seek medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention immediately.

Ingestion:

DO NOT induce vomiting immediately. Aspiration of material into lungs can cause pulmonary edema. Never give anything by mouth to an unconscious person, get immediate medical assistance.

Advice To Physicians:

Inhalation, ingestion or skin absorption of methanol can cause significant disturbance in vision, including blindness. May cause systematic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed
by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma, and possible death due to failed respiratory failure. May cause cardiopulmonary system effects. Immediate treatment at a surgical emergency center is recommended.

5. FIRE FIGHTING MEASURES

Flash point: Typical 60 °C

Products of combustion

water fog, foam, carbon dioxide or dry chemical.

Cool fir exposed containers with water.

Specific Hazards Arising from the Chemical

Flammable liquid and vapor. Vapors may accumulate in confined

areas and present a fire of explosion hazard. Vapors may be heavier than air and travel along surfaces to remote

ignition sources and flash back. Closed containers may rupture if exposed to extreme heat. Burning may produce

carbon monoxide, carbon dioxide and oxides of nitrogen.

Special Fire Fighting Procedures

In case of fire, use water fog, foam, dry chemicals, or carbon dioxide. Do not use water.

6. Accidental release measures

Personal precautions:

Caution – slip hazard. Eliminate all ignition sources and ventilate the

area. Wear appropriate protective equipment

Methods and Materials for Containment and Clean-Up:

Stop spill at the source if it is safe to do so. Absorb with an inert material. Collect into a suitable container for disposal. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard.

Environmental Precautions

Prevent entry in storm sewers and waterways. Report spill as required by local and national regulations. Notify the National Response Center if a spill of any amount enters navigable waters, the contiguous zone, or adjoining shorelines.

7. Handling and storage

Handling: Avoid contact with skin and clothing. Avoid prolonged or repeated contact with skin. Avoid contact with eyes. Use only with adequate ventilation. Avoid breathing vapor or mist. Wash thoroughly after handling.
Empty containers retain product residue and may be hazardous. Do not reuse empty containers.

Storage Store in a cool, dry, well-ventilated area. Keep container tightly closed. Store locked up. Store away from oxidizing agents and other incompatible materials. Keep away from open flames, sparks, and excessive heat.

8. Exposure controls/personal protection

Ventilation: Use adequate ventilation to keep gas and vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces. Use only intrinsically safe electrical equipment approved for use in classified areas.

Respiratory Protection: None under normal use conditions. For operations where the exposure limits are exceeded, a NIOSH approved respirator with an organic vapor cartridge or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration. Select in accordance with 29 CFR 1910.134and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

Hand protection: Resistant gloves (Nitrile and Neoprene) are handling this Material.

Eye Protection: Chemical safety goggles are recommended.

Skin and body protection: Appropriate protective clothing as needed to prevent prolonged/ repeated skin contact .

Other information: Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use solvents or harsh abrasive skin cleaners for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

9. Physical and chemical properties

Physical state	Liquid
Color	Clear**,** light yellow
Odor	Characteristic, fruity, ester
Density	820 kg/m^3 at 15°C
Flash point	66
Solubility	Water soluble
pH	NA

10. Stability and Reactivity

Stability and reactivity	May be unstable at temperatures greater than 100 °C
Conditions to avoid	Avoid temperatures above 50 °C, open flames, sparks, welding, smoking and other ignition sources. Keep away from strong oxidizers.
Incompatibility with various Substances	Reactive or incompatible with the following materials: Strong acids and oxidizing materials

Hazardous decomposition products	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.
Hazardous polymerization	will not occur.

11. Toxicology Information

Acute toxicity Local effects Product Information

Skin contact	Prolonged skin contact may cause skin irritation and/or dermatitis.
Eye contact	The liquid splashed in the eyes may cause irritation and reversible damage. Strong lachrymation can make it difficult to escape.
Further information	Liver and kidney injuries may occur. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. May cause irritation of respiratory tract.

12. Ecological information

This material is not expected to be harmful to aquatic organisms.

13. Disposal considerations

Dispose of in accordance with all local, state/provincial and federal regulations.

14. Transport information

Land transport (ADR/RID):

Proper shipping name: Flammable liquids Ethylhexyl nitrate)

UN-No. : UN1993
Class: 3
Packing group: II
Inland waterways transport (ADN):
This product is not classified as dangerous for this mode of transport.

Sea transport (IMDG Code):
Proper shipping name: Flammable liquids
UN-No. : UN1993
Class: 3
Packing group

Air transport (IATA/ ICAO):
UN UN-No. : UN1993
Description: Flammable liquids
Class: 3
Packaging group: II
ICAO-Labels: 3

Shipping Description (IMO/IMDG):
UN-No. : UN1993
Description: Flammable liquids
Class: 3
Packaging group: II
IMDG-Labels: 3
EmS Number: F-E S-D
Marine pollutant: Yes

15. Regulatory information

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

- SARA SECTION 311/312(Hazard):
  Acute health hazard No
  Chronic Health Hazard No
  Fire hazard No
  Sudden release of pressure hazard No
  Reactive Hazard No
- SARA SECTION 313:
  This product does not contain greater than 1.0% (greater than 0.1% for carcinogenic substance) of any chemical
- The Environmental protection Act
  (Environmental laws and Regulations of Iran-article 9)
- The Regulation of control of hazardous materials and flammable and explosive - (29, 30, 36 up 57 articles)
- The regulation of Water pollution prevention– article 2
- The regulation of hazardous material Road transportation – article 1

16. Other information

Label requirements: Flammable liquid

Moderate skin irritant

Moderate eye irritant

Highly toxic by ingestion.

Abbreviations and Acronyms

ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN = European Agreement concerning the international carriage of dangerous goods by inland waterways

IATA = International Air Transport Association

IMDG = International Maritime Dangerous Goods

ASTM = American Society for Testing and Materials

CAS = Chemical Abstracts Service